

This second summary of the status of fluoridation includes the number of communities adding fluorides to their water supplies, the number of water supply systems, the population served, and the percentage of towns in each population category using this public health measure.

Status of Controlled Fluoridation in the United States, 1945-56

DURING 1956 fluoride was added for the first time to the drinking water of more than 6,500,000 people (table 1). This is nearly twice the number of people who started drinking fluoridated water in 1955. The 1956 increase was exceeded only in 1952 when 8,600,000 people started drinking fluoridated water.

In 1956, 213 communities started fluoridating their drinking water, a larger number than in each of the preceding 2 years. The number of water supply systems which these communities represent was slightly fewer than the number starting fluoridation in 1955 (92 compared with 96).

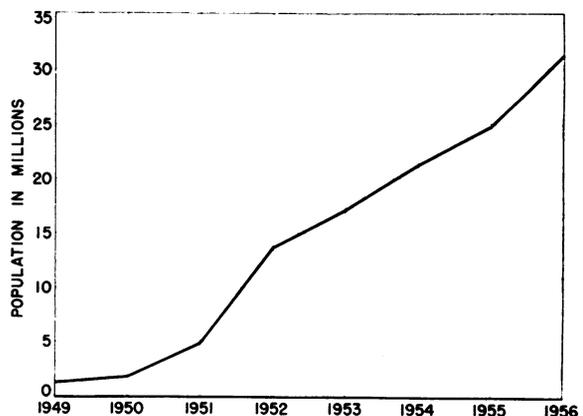
During the year, 12 water supply systems, representing 16 communities and serving a population of 185,000, discontinued fluoridation. Four water supply systems, representing an equal number of communities and serving 38,000 people, reinstated the practice after discontinuance.

Although the annual rate of increase in the number of water supplies instituting fluoridation remained about the same during the last 3 years, there was a decline in the rate at which water supplies discontinued fluoridation. In 1954, 20 systems discontinued this public health measure. In 1956, 12 water systems stopped fluoridating. Two systems reinstated fluoridation in 1954, four in 1956.

By the end of 1956 nearly 1,500 communities with 31,500,000 people fluoridated their water. It has been estimated that about 110,000,000 people in the United States are served by community water supply systems. At the present time about 1 in every 4 of these people are drinking water with adjusted fluoride content. It seems apparent that the number of people using water with a controlled fluoride content will continue to increase at a substantial rate.

The year 1956 was the 12th year in which the practice of adding fluoride to the drinking water in optimal amounts has been practiced as a caries control measure. The procedure was started in a few study communities in 1945. More study communities were added in 1946

Figure 1. Population drinking water with adjusted fluoride content, 1949-56.



*Prepared by the Division of Dental Public Health,
Bureau of State Services, Public Health Service.*

and 1947. By 1949 and 1950 a small number of places, convinced of the benefits to be derived from fluoridation, instituted the measure as a regular practice. Late in 1950 published reports confirmed the anticipated reduced incidence of dental decay resulting from the addition of fluoride to drinking water, and national professional organizations endorsed the procedure. As a result, 109 communities in 1951 and 182 in 1952 decided to bring this health measure to their people, and the trend in reduction of tooth decay by an observed two-thirds was well under way.

As adoption of the procedure gathered momentum, the number of people drinking fluoridated water increased from about 1.6 million in 1950 to 5 million in 1951, 13.6 million in 1952, 17 million in 1953, 21 million in 1954, 24.8 million in 1955, and finally reached 31.4 million last year (fig. 1).

During the entire 12-year period, 80 communities, which at one time served fluoridated water to 1,900,000 people, discontinued the procedure. Of these, 10 communities, serving 223,000 people, reinstated the practice (table 2).

According to the 1950 Census of Population,

Table 1. Annual cumulative findings on the institution, discontinuance, and reinstatement of controlled fluoridation showing number of communities, water supply systems, and population served,¹ 1945-56

Year	Fluoridation status at end of each year			Fluoridation instituted whether or not discontinued		
	Number of communities	Number of water supply systems	Population	Number of communities	Number of water supply systems	Population
1945.....	6	3	231, 920	6	3	231, 920
1946.....	12	8	332, 467	12	8	332, 467
1947.....	16	11	458, 748	16	11	458, 748
1948.....	24	13	581, 683	24	13	581, 683
1949.....	46	29	1, 062, 779	46	29	1, 062, 779
1950.....	95	62	1, 578, 578	96	63	1, 595, 128
1951.....	329	171	4, 948, 259	331	173	4, 977, 709
1952.....	709	353	13, 552, 501	716	360	13, 754, 623
1953.....	949	482	17, 080, 930	961	494	17, 168, 202
1954.....	1, 128	571	21, 208, 304	1, 160	601	22, 361, 517
1955.....	1, 274	667	24, 775, 698	1, 332	713	26, 308, 979
1956.....	1, 487	759	31, 416, 112	1, 557	813	33, 095, 570

Year	Fluoridation discontinued whether or not reinstated			Fluoridation reinstated after discontinuance		
	Number of communities	Number of water supply systems	Population	Number of communities	Number of water supply systems	Population
1945.....						
1946.....						
1947.....						
1948.....						
1949.....						
1950.....	1	1	16, 550			
1951.....	2	2	29, 450			
1952.....	7	7	202, 122			
1953.....	14	14	253, 738	2	2	166, 466
1954.....	36	34	1, 323, 613	4	4	170, 400
1955.....	64	52	1, 717, 653	6	6	184, 372
1956.....	80	64	1, 902, 199	10	10	222, 741

¹ Most recently available population figures were used regardless of the year that fluoridation was instituted.

Table 2. Annual incremental findings on the institution, discontinuance, and reinstitution of controlled fluoridation showing number of communities, water supply systems, and population served, 1945-56

Year	Fluoridation instituted each year			Fluoridation instituted whether or not discontinued		
	Number of communities	Number of water supply systems	Population	Number of communities	Number of water supply systems	Population
Total	1, 487	759	31, 416, 112	1, 557	813	33, 095, 570
1945.....	6	3	231, 920	6	3	231, 920
1946.....	6	5	100, 547	6	5	100, 547
1947.....	4	3	126, 281	4	3	126, 281
1948.....	8	2	122, 935	8	2	122, 935
1949.....	22	16	481, 096	22	16	481, 096
1950.....	49	33	515, 799	50	34	532, 349
1951.....	234	109	3, 369, 681	235	110	3, 382, 581
1952.....	380	182	8, 604, 242	385	187	8, 776, 914
1953.....	240	129	3, 528, 429	245	134	3, 413, 579
1954.....	179	89	4, 127, 374	199	107	5, 193, 315
1955.....	146	96	3, 567, 394	172	112	3, 947, 462
1956.....	213	92	6, 640, 414	225	100	6, 786, 591

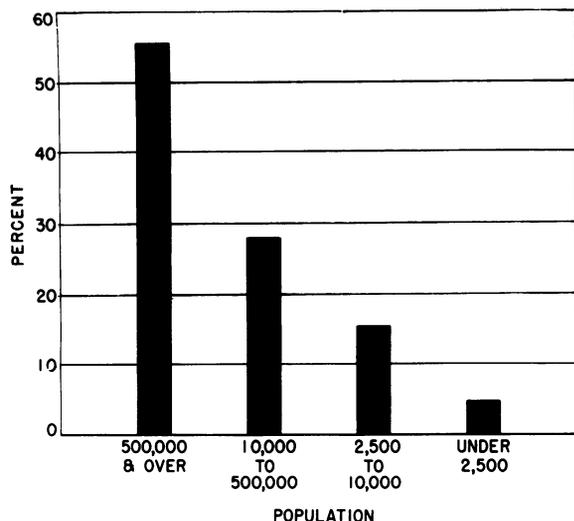
Year	Fluoridation discontinued whether or not reinstated			Fluoridation reinstated after discontinuance		
	Number of communities	Number of water supply systems	Population	Number of communities	Number of water supply systems	Population
Total	80	64	1, 902, 199	10	10	222, 741
1945.....						
1946.....						
1947.....						
1948.....						
1949.....						
1950.....	1	1	16, 550			
1951.....	1	1	12, 900			
1952.....	5	5	172, 672			
1953.....	7	7	51, 616	2	2	166, 466
1954.....	22	20	1, 069, 875	2	2	3, 934
1955.....	28	18	394, 040	2	2	13, 972
1956.....	16	12	184, 546	4	4	38, 369

there were 18,548 communities in urban and rural territory in the United States. Table 3 presents a comparison of these communities, by size group, with the numbers of places using controlled fluoridation. Two of the five communities of over 1,000,000 population are now fluoridating their drinking water as are 8 of the 13 communities of 500,000 to 1,000,000 population. Thus, 55 percent of the largest cities in the country have adopted the measure. From 25 to 30 percent of places ranging in size from 10,000 to 500,000, and 15 percent of the

places from 2,500 to 10,000 population are now fluoridating. Of the 14,000 places of less than 2,500 population, only 5 percent are adding fluoride. Figure 2 shows the number of communities, by size, that have adopted the fluoridation procedure.

During 1956 the proportion of cities of 500,000 population and more that were fluoridating increased from 45 to 55 percent. Those with a population of from 10,000 to 500,000 people increased from 24 to 28 percent. The number of places from 2,500 to 10,000 in population

Figure 2. Percentage of communities fluoridating their water supplies, by size, December 31, 1956.



using fluoridation increased from 12 to 15 percent, and the percentage of those under 2,500 increased from 4 to 5.

Water supplies in 85 percent of all communities fluoridating are operated under public ownership. The proportion is similar among large and small cities.

How the institution of fluoridation was authorized is a subject of considerable interest. In nearly 85 percent of the communities the governing body alone constituted the authority for

the action. In 5 percent, the authority was referendum; and in 4 percent of communities fluoridating, the utilities commission made the decision. It is interesting to note that in 91

Table 3. Total communities in the United States, by size group, compared with the proportion of each using controlled fluoridation, December 31, 1956

Population of community	Number of communities in urban and rural territory ¹	Communities using controlled fluoridation	
		Number	Percent of all communities of same size
Total	18, 548	1, 487	8. 0
1,000,000 and over.....	5	2	40. 0
500,000-999,999.....	13	8	61. 5
250,000-499,999.....	23	7	30. 4
100,000-249,999.....	65	19	29. 2
50,000-99,999.....	126	42	33. 3
25,000-49,999.....	252	78	31. 0
10,000-24,999.....	778	201	25. 8
5,000-9,999.....	1, 176	209	17. 8
2,500-4,999.....	1, 846	251	13. 6
1,000-2,499.....	4, 296	277	6. 4
Under 1,000 and not specified.....	9, 968	393	3. 9

¹ SOURCE: Number of places in urban and rural territory, by size of place: 1950. Statistical abstract of the United States, Bureau of the Census, United States Department of Commerce, 1955, table 15, p. 23. Places under 2,500 in urban territory distributed in proportion to the distribution in rural territory.

Table 4. Ownership and authorization for fluoridation in places fluoridating, December 31, 1956, by size of community

Population size of community	Number of communities	Ownership			Authorization			
		Public	Private	Other and not specified	Govern- ing body alone	Refer- endum	Utilities com- mission	Other and not specified
Total	1, 487	1, 272	190	25	1, 252	77	56	102
1,000,000 and over.....	2	2	0	0	2	0	0	0
500,000-999,999.....	8	8	0	0	7	1	0	0
250,000-499,999.....	7	6	1	0	7	0	0	0
100,000-249,999.....	19	17	2	0	17	0	0	2
50,000-99,999.....	42	36	6	0	39	1	0	2
25,000-49,999.....	78	70	7	1	70	2	2	4
10,000-24,999.....	201	180	15	6	173	12	5	11
5,000-9,999.....	209	177	30	2	180	10	1	18
2,500-4,999.....	251	214	28	9	208	9	6	28
1,000-2,499.....	277	235	35	7	233	9	10	25
Under 1,000.....	190	148	42	0	168	9	4	9
Not specified.....	203	179	24	0	148	24	28	3

percent of places of 25,000 and over in population, the procedure was authorized by the governing body. The smaller places resorted to referendum or utilities commission action with a little greater frequency—the largest percentage (6 percent) being observed in communities ranging from 10,000 to 25,000 in size. Table 4 shows findings on ownership and authorization.

Today, only 8 of the 18 cities in the country with over 500,000 population are not fluoridating. It is anticipated that most of these eight cities will institute fluoridation within the next

several years. After that occurs the rate of increase in the number of people drinking fluoridated water will depend largely upon the rate of adoption in cities of between 10,000 and 500,000. The lag in the smaller centers may also be overcome during the next several years because of the greatly reduced costs that are now possible, the present availability of simplified and accurate techniques for determining the fluoride content of water supplies, and the growing public acceptance of the measure throughout the country.

Employment After Forty

In a move to reduce enforced idleness, at the root of many difficulties besetting older people, New York State has raised to 38 the number of "older worker" counselors in the State Labor Department's employment service now serving in 15 cities.

These specialists were able in 1956 to find jobs for 4,100 of the 11,000 job seekers over 45 years old who had found their age an insuperable stumbling block in the hunt for work and accordingly had suffered loss of confidence. With the help of the counselors, they were accepted as teachers, purchasing agents, methods engineering consultants, organ makers, foremen, construction workers, bookkeepers, and for a wide variety of other positions.

Supplementing the work of these specialists, State employment offices in all localities emphasize placement of all older workers including those with special problems not related to age. A quarter of a million jobs, better than 1 out of every 4 filled by the employment service in 1956, went to persons over 45.

In part this indicates a generally tightening

labor market, but it also reflects efforts to persuade employers to abandon arbitrary age restrictions. In two cities, Newburgh and White Plains, the employment service found itself with more employer orders for mature workers than it could fill, until local newspapers helped encourage applications from older men and women who had thought that they would never find work again.

The professional office of the employment service in New York City, reporting 40 "older worker" placements in the first month after intensive efforts began, is one of the many offices to note changing and cooperative employer attitudes. Surprise has been expressed by employers at the variety and level of skill in the older group. This office reports that there is a new emphasis on qualifications rather than age and adds that these older workers have been placed in their own fields at their own level, an encouraging improvement over the stopgap type of job that they have been forced to take until recently.

—AVERELL HARRIMAN, *Governor of New York*,
in a legislative message, February 12, 1957.